

[54] TV MOVIES THAT TALK BACK

[76] Inventor: Robert M. Best, 16016 9th NE.,
Seattle, Wash. 98155

[21] Appl. No.: 159,141

[22] Filed: Jun. 13, 1980

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 136,100, Mar. 31,
1980, which is a continuation of Ser. No. 9,533, Feb. 5,
1979, abandoned.[51] Int. Cl.³ G11B 31/00; G06F 15/44;
G10L 1/00[52] U.S. Cl. 364/521; 179/1 SM;
340/725; 352/5; 358/102; 358/903; 364/410;
434/323; 367/198[58] Field of Search 364/415, 521, 419, 900;
340/148, 725; 358/93, 102, 103; 352/5;
360/72.2; 179/1 SA, 1 SM, 1 CN, 1 SD;
434/300-330

[56] References Cited

U.S. PATENT DOCUMENTS

3,601,530	8/1971	Edson	179/1 CN
3,662,374	5/1972	Harrison et al.	352/5
3,721,757	3/1973	Ettlinger	360/72.2
3,742,143	6/1973	Awipi	179/1 SD
3,747,087	7/1973	Harrison et al.	358/93 X
3,778,058	12/1973	Rausch	340/725 X
3,825,674	7/1974	Justice	434/307 X
3,878,560	4/1975	Ramage	35/35 C
3,883,850	5/1975	Martin et al.	179/1 SA X
3,928,724	12/1975	Byram et al.	179/1 SD
3,939,579	2/1976	Andrews et al.	434/316
3,943,295	3/1976	Martin	179/1 SA
3,946,157	3/1976	Dreyfus	179/1 SA
3,960,380	6/1976	Yokoi	273/311
3,974,482	8/1976	Balashov et al.	364/900
3,987,484	10/1976	Bosche et al.	434/307 X
4,016,540	4/1977	Hyatt	179/1 SM
4,059,841	11/1977	Bricot et al.	358/128
4,060,915	12/1977	Conway	434/307
4,075,620	2/1978	Passavant et al.	364/521 X
4,116,444	9/1978	Mayer et al.	364/521 X
4,130,881	12/1978	Haessler et al.	364/415 X
4,158,750	6/1979	Sakoe et al.	179/1 SD

4,210,785 7/1980 Huber 360/72.2 X

OTHER PUBLICATIONS

Yasaki: Voice Recognition Comes of Age, Datamation,
Aug. 1976, pp. 65-68.Martin: One Way to Talk to Computers, IEEE Spec-
trum, May 1977, pp. 35-39.Bagley et al.: Method for Computer Animation of Lip
Movements, IBM Technical Disclosure Bulletin, vol.
14, No. 10, Mar. 1972, pp. 3039-3040.Cavanagh: Educational Institutional Features of the
Optical Videodisc System, Journal of the SMPTE, vol.
86, Apr. 1977, pp. 201-203.Wells: Random Selection and Brouching in the Godi-
son Picture Audio Visual Field, Journal of the SMPTE,
Nov. 1970, vol. 79, 983/990.Suppes: The Use of Computers in Education Scientific
American, vol. 215, Sep. 1966, pp. 207/220.Kenney: Special Purpose Application of the Optical
Video-Disc System, IEEE Transaction on Consumer
Electronics, Nov. 1976, pp. 327-338.

Primary Examiner—Felix D. Gruber

Attorney, Agent, or Firm—Graybeal & Uhler

[57]

ABSTRACT

A video entertainment system by which human viewers conduct simulated voice conversations with screen actors or cartoon characters in a prerecorded branching movie shown on a television screen. The actors and cartoons reply responsively with lip-sync sound to words spoken by viewers. Different audio and video frames are addressed on a videodisc to provide one of several alternative replies or alternative actions at each branch point in the movie, depending on what the viewer says to a speech-recognition unit. A simple speech-recognition unit can be used because the number of words to be recognized at each branch point is restricted to just a few words. A menu of prompting words is displayed on a hand-held unit to inform viewers of what words they can use at each branch point. The prompting words are programmed to be phonetically distinct to be easily distinguishable from each other. Viewers can input questions or make other remarks by speaking a displayed code word which stands for a whole sentence. Pressing a button next to a sen-